

## **CLAIM AMENDMENTS**

This listing of claims will replace all prior versions and listings of claims in the application.

### **Listing of Claims**

1. (Currently Amended) A method for mapping a DICOM-SR document into an XML document, comprising:

mapping each DICOM attribute of a plurality of DICOM attributes in the DICOM-SR document into a corresponding XML element of a plurality of XML ~~elements~~, and elements,

outputting each XML element of the plurality of XML elements to the XML document, in a format that conforms to an XML document-type-definition of the XML document, and

parsing each DICOM attribute to segregate a DICOM data type, and a DICOM codeID from the DICOM attribute,

wherein the mapping includes:

assigning the DICOM codeID to a first attribute of the corresponding XML element,

mapping the DICOM data type to a corresponding value type of the corresponding XML element, and

assigning the corresponding value type to a second attribute of the corresponding XML element, and

wherein the mapping of each DICOM attribute into a corresponding XML element is independent of the XML document-type-definition of the XML document.

2. (Original) The method of claim 1, wherein outputting each XML element includes formatting the XML element via one or more XSLT templates to conform to the XML document-type-definition.
3. (Original) The method of claim 2, wherein the formatting of the XML element is via an XSLT engine.
4. (Original) The method of claim 2, wherein the one or more XSLT templates correspond to one or more DICOM Information Entities.
5. (Cancelled)
6. (Cancelled)
7. (Currently amended) The method of ~~claim 6~~claim 1, further including parsing the DICOM attribute to segregate a DICOM attribute value, and wherein the mapping further includes assigning the DICOM attribute value to a third attribute of the corresponding XML element.
8. (Currently amended) A computer-implemented DICOM to XML conversion system ~~that comprises, comprising:~~

a DICOM parser that is configured to provide a plurality of DICOM attributes from a DICOM data file,

an XML formatter, operably coupled to the DICOM parser, that is configured to provide a plurality of XML elements corresponding to the plurality of DICOM attributes, and

an XML builder operably coupled between the DICOM parser and the XML formatter, said XML builder being configured to effect a direct mapping of each DICOM attribute of the plurality of DICOM attributes into a corresponding XML element of the plurality of XML elements independent of an XML document-type-definition of an XML document comprising the plurality of XML elements, wherein

the DICOM parser is configured to parse each DICOM attribute to provide a DICOM data type, and a DICOM codeID from the DICOM attribute, and

the XML builder is configured to:

assign the DICOM codeID to a first attribute of the corresponding XML element,

map the DICOM data type to a corresponding value type of the corresponding XML element, and

assign the corresponding value type to a second attribute of the corresponding XML element.

9. (Previously presented) The DICOM to XML conversion system of claim 8, wherein the XML formatter is configured to provide the plurality of XML elements in a format that conforms to the XML document-type-definition of the XML document.

10. (Original) The DICOM to XML conversion system of claim 9, wherein the XML formatter includes an XSLT engine that is configured to provide the plurality of XML elements based on one or more XSLT stylesheet templates that conform to the XML document-type-definition.

11. (Original) The DICOM to XML conversion system of claim 10, wherein the one or more XSLT stylesheet templates correspond to one or more DICOM Information Entities.

12. (Cancelled)

13. (Cancelled)

14. (Currently amended) The DICOM to XML conversion system of ~~claim 13~~claim 8, wherein the DICOM parser is further configured to parse each DICOM attribute to provide a DICOM attribute value, and the XML builder is further configured to assign the DICOM attribute value to a third attribute of the corresponding XML element.